

ABSTRACT

A video compression process speeds the optimal choice of quantizers for compressing a data stream by setting up the optimization problem as a path-optimization problem in configuration space and finding the lowest cost path through the configuration space. The process begins with a starting node (or "state") and propagates least-cost waves through the space until a path is completed to the end. The process may continue using uncompleted paths while their costs are less than the end state, beginning with the lowest cost incomplete path, until an improved path is found. The process may further continue, for a time constrained process, until time runs out or all useful possibilities are exhausted.